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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/734,673

**Applicant(s)**

HAYAKAWA, KEISUKE

**Examiner**

ANIL N. KUMAR

**Art Unit**

2174

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 52-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-94 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

### DETAILED ACTION

This communication is responsive to the **amendment filed February 17, 2009** (original application filed December 30, 2006). Applicant has added new claims 52-94, and cancelled claims 1-51. **THIS ACTION IS MADE FINAL.** Claims 52-94 are pending of which claims 52, 54, 55, 56, 62, 63, 64, 66, 69, 70, 75, 79, 81, 83, 87, 88, 89 and 90 are in independent form. Claims 52-94 are presented for examination.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 52-57, 62, 63, 65 and 79-82 are rejected under 35 U.S.C. 102(b) as being unpatentable over Henckel et al. ("Henckel", US 5,463,725) in view of ) in view of Kuno et al. ("Kuno", US 5,467,102).

Claims 52, 54, 55: Henckel et al. disclose a method, device and a storage medium (The display device 10 may be part of a work station or other computer system, column 2 lines 13-24)for a page information display method for displaying the electronic information using an information access device comprising a storage unit for storing the electronic information having plural

pages of information in a unit of page of predetermined size, a display unit for displaying the electronic information stored in said storage unit in said unit of page, and an operation unit for inputting an operation to gain access to said page information, said operation unit being provided in the substantially same area as said display unit, comprising:

- a page turning operation detecting step of outputting a page turning operation detecting signal when a dragging is made on said operation unit in parallel or anti-parallel to a predefined page turning direction at a current page read from said storage unit that is to be displayed at present (a check is made to see if there are any touching events on the input screen, column 5 lines 30-41 and Fig. 6);
- a next display page setting step of setting a preceding page or a succeeding page immediately before or after the current page depending on a direction of said dragging operation to a next display page to be displayed at the next time, when the page turning operation detecting signal is output in said page turning operation detecting step (the variables firstpos and prevpos are set to the current position of the touch, column 5 lines 42-52 and Fig. 6);
- and a page turning process step of displaying the next display page set in said next display page setting step in place of said current page on said display unit (The animation corresponding to any of the actions described above is then displayed 68, column 5 lines 42-52 and Fig. 6 and Fig. 2);

- detecting a page holding operation and calculating a number of holding pages in said page holding operation based on a position on said operation unit which corresponds to at least one of an information access area of said display unit and a tag display area of said display unit (a determination is made of the necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);
- wherein said page turning operation detecting step further comprises an operation rate calculating substep of calculating a page turning rate that is a speed of said page turning operation, and said page turning process step further comprises a display rate setting substep of setting a display rate corresponding to the page turning rate calculated in said operation rate calculating step to change the display from the current page to the next display page (This would require the capability to recalculate the appearance of a partially turned page in real time as the user swipes his finger across the screen, column 3 lines 29-36).

but does not explicitly disclose,

- calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position.

However, Kuno discloses, a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied (the speed of moving the pages can be changed according to

the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must be done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the calculation based on a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.

Claim 53: Henckel disclose, wherein said page turning operation detecting step further comprises a page turning operation judging substep of judging, as said page turning operation, an operation exceeding a minimum operation length in said page turning direction within a predefined allowance region in a direction orthogonal to said page turning direction (the user preferably need only make a swipe which is one-half to one inch long in order to cause a page to be turned, column 3 lines 12-27).

Claims 56, 62 and 63: Henckel et al. disclose, a page information display method, device and a storage medium for displaying electronic information, employing an information access device comprising a storage unit for storing the electronic information having plural pages of information in a unit of page of predetermined size, a display unit for displaying the electronic information stored in said storage unit in said unit of page, and an operation unit for inputting an

operation to gain access to said page information, said operation unit being provided in the substantially same area as said display unit, comprising::

- a page holding operation detecting step of outputting a page holding operation detecting signal when a predetermined page holding operation is made at a current page read from said storage unit that is to be displayed at present, and calculating a number of holding pages in said page holding operation based on a position on said operation unit which corresponds to at least one of an information access area of said display unit and a tag display area of said display unit (a determination is made of the necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);
- a holding page number displaying step of displaying the total number of holding pages in accordance with the amount of said page holding operation on said display unit, when the page holding operation is initially detected in said page holding operation detecting step (This causes a corner to be lifted up as illustrated in FIG. 4, displaying the page numbers of the underlying pages, column 4 lines 24-51);
- a next display page setting step of setting a page having a page number that is equal to the current page added or subtracted by the amount of said holding operation to a next display page to be displayed at the next time, when the page holding operation detecting signal is output in said page holding operation detecting step (A determination is then made of any

- appropriate actions which need to be performed. These include: 3)  
completing the turning of multiple pages, column 5/6 lines 66-9 and Fig. 6  
Block 66);
- a page turning process step of displaying the next display page set in said next display page setting step in place of said current page on said display unit (The animation corresponding to any of the actions described above is then displayed 68, column 5 lines 42-52 and Fig. 6, and Fig.4);  
but does not explicitly disclose,
  - calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position.

However, Kuno discloses, a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied (the speed of moving the pages can be changed according to the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must be done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the calculation based on a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.



Claim 57 is similar in scope to claim 56, and therefore rejected under similar rationale.

Claim 65 is similar in scope to claim 64, and therefore rejected under similar rationale.

Claim 79: Henckel et al. disclose a device for a page information display device, comprising:

- having an electronic information memory for memorizing the electronic information having plural pages of information in a unit of page of predetermined size (Fig. 5);
- a touch panel for displaying the electronic information stored in said electronic information memory in said unit of page, as well as inputting an operation to gain access to said page information (touch screen 48 is actually part of the display device 10, columns 4/5 lines 65-5 and Fig. 5);
- a display controller for controlling the display of the page information stored in said electronic information memory on the basis of an operation content input into said touch panel, said display controller comprising an event driven display control portion for enabling the pages displayed on said touch panel to be changed on the basis of the time and locus from a pointer down to up on said touch panel (Alternatively, the user may touch a point slightly outside the graphic display of the book at a location such as location 36, followed by

sliding the touch point to a location such as location 38, column 4 lines 24-51 and Fig. 4), said event driven display control portion comprising a page selection function for each locus direction for selecting a page having a smaller page number or a larger page number than that of a page being displayed at present on the basis of the locus of pointer from said pointer down to up (By moving his contact point to a location near location 38, an animation of a page flip occurs with rapidly decreasing page numbers indicated. By sliding the touch location to a position such as location 40, page numbers will increase column lines and Fig. 4);

- a page holding operation detecting portion for detecting a page holding operation and calculating a number of holding pages in said page holding operation based on a position on said operation unit which corresponds to at least one of an information access area of said display unit and a tag display area of said display unit (a determination is made of the necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);

but does not explicitly disclose,

- calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position.

However, Kuno discloses , a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of

a pressure applied (the speed of moving the pages can be changed according to the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must e done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the calculation base don a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.

Claim 80: Huffman et al. disclose, wherein said electronic information memory has the article information making up each page of said electronic information, and said event driven display control portion has an article continuous display function of continuously displaying in enlargement the article information overlapped on a path of the locus on the basis of said path of the locus (-a user selection method, in which the user uses his finger or stylus to point a location on the screen and slide across the screen -, portion 330 is selected by a user-initiated event of sliding his finger 212, column 13 lines 45-56 and Fig. 19). One would be motivated to provide this feature, as it is the easiest way to allow the user to dynamically select and manipulate a portion of display.

Claim 81: Henckel et al. a page information display device comprising:

- having an electronic information memory for memorizing the electronic information having plural pages of information in a unit of page of predetermined size (Fig. 5);
- a touch panel for displaying the electronic information stored in said electronic information memory in said unit of page, as well as inputting an operation to gain access to said page information (touch screen 48 is actually part of the display device 10, columns 4/5 lines 65-5 and Fig. 5);
- a page holding operation for detecting a page holding operation and calculating a number of holding pages in said page holding operation based on a position on said operation unit which corresponds to at least one of an information access area of said display unit and a tag display area of said touch panel (a determination is made of the necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);
- a display controller for controlling the display of the page information stored in said electronic information memory on the basis of an operation content input into said touch panel, said display controller comprising:
  - a cache memory (see Fig. 5 and block 46) for memorizing temporarily the page information that is judged to be displayed on said touch panel among the electronic information stored in said electronic information memory,

- a continuous page prefetch control portion (see Fig. 6 and block 60) for storing in advance the page information having a page number following the page number of the current page being displayed at present on said touch panel in said cache memory,
- and a page turning process control portion (see Fig. 6 and block 76) for effecting a page turning process by selecting one or more pages in accordance with an operation on said touch panel, wherein said continuous page prefetch control portion (see Fig. 6 block 70) has a pages turning time deleting function of deleting the page data in plural pages from said cache memory, in the case where a page turning operation of plural pages is detected by said page turning process control portion;

but does not explicitly disclose,

- calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position.

However, Kuno discloses, a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied (the speed of moving the pages can be changed according to the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must e done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time to combine the calculation base don a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.

Claim 82: Henckel et al. disclose, wherein said display controller comprises an article information prefetch control portion for storing the article information within said current page in said cache memory in the case where the article information is contained in said current page (other processing can include any display changes, and related changes, which are performed along with the page turning technique, column 5 lines 42-52 and Fig. 6).

3. Claims 59-61, 64, 69 and 87-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel et al. (US 5,463,725) Kuno et al. ("Kuno", US 5,467,102) and in further view of Ho (US 6,407,757 B1).

Claims 59-61: Either Henckel et al. or Kuno explicitly disclose, wherein said holding page number displaying step comprises a substep of displaying a holding display circle defined with a radius of the size (or by number of circles or a coated circle) corresponding to said page holding amount on said display unit. However, Ho discloses , A computer based browsing computer program product (Abstract), and further teach, various tag shape, size and colors (They –tags- are

differentiated either by shape, size, color, marking –various forms of circles-, or lettering, column 17 lines 8-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the teachings of Ho, in modified Henckel in order to provide the user a better way to view different tags of the viewing document.

Claims 64 and 69: Henckel et al. disclose, a page information display method for displaying electronic information, employing an information access device having a storage unit for storing the electronic information having plural pages of information in a unit of page of predetermined size, a display unit for displaying the electronic information stored in said storage unit in said unit of page, and an operation unit for inputting an operation to gain access to said page information, said operation unit being provided in the substantially same area as said display unit, wherein said display unit has an information access area for displaying the electronic information stored in said storage unit in said unit of page, and one and the other tag display areas for displaying a tag indicating the content of said page, said tag display areas being provided at both ends of said information access area, comprising:

- a page holding operation detecting step of out putting a page holding operation detecting signal when a predetermined page holding operation is made at a current page read from said storage unit that is to be displayed at present and calculating a number of holding pages in said page holding

operation based on a position on said operation unit which corresponds to at least one of an information access area of said display unit and a tag display area of said display unit (a determination is made of the necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);

- a next display page setting step of setting a page having a page number that is equal to the current page added or subtracted by the amount of said holding operation to a next display page to be displayed at the next time, when the page holding operation detecting signal is output in said page holding operation detecting step (A determination is then made of any appropriate actions which need to be performed. These include: 3) completing the turning of multiple pages, column 5/6 lines 66-9 and Fig. 6 Block 66);
- a page turning process step of displaying the next display page set in said next display page setting step in place of said current page on said display unit (The animation corresponding to any of the actions described above is then displayed 68, column 5 lines 42-52 and Fig. 6, and Fig.4);
- following said page holding operation detecting step, further comprising a before- turning holding object for a holding object page that is held by said page holding operation with a different from other tags in one tag display area that is displaying a tag appended to the current page, when the page holding operation is initially detected in said page holding operation detecting step



(performing such a flipping function at the upper corners of the pages preferably allows chapter headings, or some other larger unit indicator, to be displayed and selected. Location of page numbers –on the bookmark or tag -, chapter headings, and so forth, may be changed as desired to suit the demands of particular implementation, column 4 lines 52-64 and Fig.4); but does not explicitly disclose,

- calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position;

However, Kuno discloses, a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied (the speed of moving the pages can be changed according to the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must e done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the calculation base don a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.

Either Henckel or Kuno, singularly or in combination, does not explicitly disclose,

- a holding object page tag coloring step of coloring a tag or / displaying circle corresponding to the number of holding objects for a holding object.;

However, Ho discloses , A computer based browsing computer program product (Abstract), and further teach, various tag shape, size and colors (They –tags- are differentiated either by shape, size, color, marking –various forms of circles-, or lettering, column 17 lines 8-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the teachings of Ho, in modified Henckel in order to provide the user a better way to view different tags of the viewing document

Claims 87, 88 and 89: Henckel et al. disclose a information display device comprising:

- reception means for receiving the page or predetermined number of pages information from a server (i.e. ... The display device 10 may be part of a work station or other computer system, an input/output device connected to a centralized mainframe or other centralized computer system ... column 2 lines 13-24, and determine necessary actions 2 or 3 based on the touch input, Fig. 6);
- a touch panel for displaying the electronic information stored in said electronic information memory in said unit of page, as well as inputting an operation to gain access to said page information (display device 10 is a touch sensitive screen capable of displaying high resolution graphics and being used as a touch sensitive input device, column 2 lines 13-24 and Fig. 5);

- a page holding operation for detecting a page holding operation and calculating a number of holding pages in said page holding operation based on a position on said operation unit which corresponds to at least one of an information access area of said display unit and a tag display area of said touch panel (a determination is made of the necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);
- and a display controller for controlling the display of the page information stored in said electronic information memory on the basis of an operation content input into said touch panel (display memory 46, which in turn drives – controller- the display 10, columns 4-5 lines 65-5 and Fig.5);
- wherein said display controller comprises:
  - a tag appending portion for displaying a tag indicating the content of the page information stored in said electronic information memory on said touch panel (i.e. ... The bookmarks may also be used for writing notes – page numbers or color coded- to be placed into the book... column 4 lines 6-18 and Fig. 3);
  - a streaming time dynamic tag appending control portion for operating said tag appending portion as the page information is being received by said reception means (the book marks or tags are displayed as part of the book, as the book is opened. See Fig. 3);

but does not explicitly disclose,

- calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position;

However, Kuno discloses, a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied (the speed of moving the pages can be changed according to the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must e done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the calculation base don a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.

Either Henckel or Kuno, singularly or in combination, does not explicitly disclose,

- a holding object page tag coloring step of coloring a tag or / displaying circle corresponding to the number of holding objects for a holding object.;

However, Ho discloses , A computer based browsing computer program product (Abstract), and further teach, various tag shape, size and colors (They –tags- are differentiated either by shape, size, color, marking –various forms of circles-, or lettering, column 17 lines 8-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the teachings of Ho, in modified Henckel in order to provide the user a better way to view different tags of the viewing document.

4. Claims 66-68 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel et al. (US 5,463,725) Kuno et al. ("Kuno", US 5,467,102) in view of Ho (US 6,407,757 B1) and in further view of Fitzpatrick et al. (US 5,392,387 A).

Claim 66 is similar in scope to claim 64, and therefore rejected under similar rationale. However, neither Henckel et al., Kuno or Ho explicitly disclose,

- a current/succeeding/preceding page tag height calculating step of calculating a display height of the current page tag on the basis of the position of said current page with respect to the total number of pages for the electronic information stored in said storage unit.

However, However, Fitzpatrick et al. teaches a method and system for enhanced data access efficiency in an electronic book (Abstract) and further teach, page tab height calculating step(Each page tab 68 thus depicted indicates the number of an associated data page –inherent that the tag height is calculated before displaying-, column lines and Fig. 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by Fitzpatrick et al., to change the height of the tabs, in modified Henckel et al. One would be motivated to display the tag heights according to the page location, as it is efficient and the most user friendly way to display tags to the user.

Claim 67 is similar in scope to claim 64, and therefore rejected under similar rationale.

Claims 68: Fitzpatrick et al. further disclose, further comprises a sub step of setting the tags appended to the current page in a display format of equal and close interval between tags (the tags in Figs. 2-3 are reasonably displayed in equally and close intervals). Motivation to combine Fitzpatrick et al. with modified Henckel et al is the same as in claim 66.

Claim 94 is similar in scope to combination of claims 59, 79 and 81, and therefore rejected under similar rationale

5. Claims 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel et al. (US 5,463,725) Kuno et al. ("Kuno", US 5,467,102) and in further view of Amro et al. (US 6,278,443 B1).

Claim 58: Henckel et al. or Kono, either singularly or in combination, do not explicitly disclose, wherein said page holding amount operation detecting step comprises a time holding page number calculating substep of calculating said number of holding pages in accordance with the elapsed time of a depressing operation that continues at the substantially same position of said operation unit. However, Amro et al. teaches steps to measure holding time as soon as a touch

sensitive screen is activated (i.e. ... If the decision in step 82 is No, then flow returns to step 80 and the system is set up to await the screen touch which will set up the mouse pad... columns 6 lines 40-65 and Fig. 8). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by Amro et al., to calculate elapsed time when a pressure sensitive screen is activated, in modified Henckel et al. One would be motivated to calculate and display total number of pages, as it will be very helpful for the user to know how many pages will be turned.

6. Claims 70-73 and 75-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel et al. (US 5,463,725) Kuno et al. ("Kuno", US 5,467,102) and in further view of Huffman et al. (5,663,748).

Claim 70: Henckel et al. disclose,

- detecting a page holding operation and calculating a number of holding pages in said page holding operation based on a position on said operation unit which corresponds to at least one of an information access area of said display unit and a tag display area of said display unit (a determination is made of the necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);
- but do not explicitly disclose,

- calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position;

However, Kuno discloses, a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied (the speed of moving the pages can be changed according to the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must be done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the calculation based on a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.

Furthermore, Henckel et al. and Kuno, either singularly or in combination, do not explicitly disclose,

- an article information enlarging operation detecting step of outputting an article information enlarging operation detecting signal having the positional information as to an article information enlarging operation, when the article information enlarging operation is detected on said operation unit, in the case where plural articles of information making up a current page are defined in said current page read from said storage unit that is to be displayed at present;



- an article information enlarging display step of displaying in enlargement the article information at a position indicated by said positional information on said display unit, in the case where the article information enlarging operation detecting signal is output in said article information enlarging operation detecting step.

However, Huffman et al. teach, the present invention advantageously provide an electronic book which looks and feels like a real paper book (column 3 lines 64-67) and further teach an article selection and enlargement method (Titles and headings in the book are enlarged and bolded based upon the primary font/size combination, columns 10/11 lines 62-7 and Fig. 9). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by Huffman et al., to enlarge and display an article such as a text, in modified Henckel et al. One would be motivated to provide this feature as it would be very helpful to customize the text size as per individual user's needs.

Claim 71: Henckel et al. and Kuno, either singularly or in combination, do not explicitly disclose, a substep of outputting an article information enlarging operation detecting signal including a click position as said positional information, when a click is made on said operation unit. However, Huffman et al. disclose a user text selection method (i.e. ... user selecting a portion of a page of text... column 13 lines 45-56 and Fig. 19). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by

Huffman et al., to select a portion of a page, in modified Henckel et al. One would be motivated to provide this feature, as it will be necessary for the user to select a portion of a page to enlarge.

Claims 72-73: Huffman et al. further disclose, wherein said article information enlarging operation detecting step further comprises an article information continuous enlarging operation detecting substep of outputting an article information continuous enlarging operation detecting signal in the case where two or more articles of information is contained in a locus of dragging, when a dragging is made on said operation unit (A portion 330 is selected by a user-initiated event –selecting information contained in the locus- of sliding –dragging- his finger 212... from a first position 332 to a second position 334 –continuous motion-), and said article information enlarging display step comprises a continuous enlarging display substep of displaying in enlargement said article information individually in time series at every predetermined time interval in the order of said dragging, in the case wherein said article information continuous enlarging operation detecting signal is output (Fig. 19). Motivation for combining Huffman et al. with modified Henckel et al. is same as in claim 70.

Claim 75 is similar in scope to claim 70, and therefore rejected under similar rationale. However, neither Henckel et al. or Kuno do not explicitly disclose,

- said article information enlarging display step further comprising an enlarging time wire frame display substep of enabling a wire frame, with a start region at an outside periphery of said article information to be enlarged, to be displayed at multiple stages of varying sizes up to an outside periphery of said display unit .

However, Huffman et al. disclose a user selection method, which is same as a wire frame selection (i.e. ... portion 330 is selected by a user-initiated event of sliding his finger 212 ... column 13 lines 45-56 and Fig. 19). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by Huffman et al., to provide a method to select a rectangular or wire frame portion of a page, in modified Henckel et al. One would be motivated to provide this feature, as it is the easiest way to allow the user to dynamically a portion of display.

Claims 76-78: Huffman et al. further disclose;

- said article information enlarging display step further comprising an reducing time wire frame display substep of enabling a wire frame, with a start region at an outside periphery of said article information to be enlarged, to be displayed at multiple stages of varying sizes up to an outside periphery of said display unit (portion 330 is selected by a user-initiated event of sliding his finger 212 –same was wire frame selection-, column 13 lines 45-56 and Fig. 19).

- an enlarged tag appending step ( selected portion 330 can include tab 380, Fig. 24).
- a substep of embossing an article (portion 330 of the text is highlighted – embossing- column 13 lines 45-56 and Fig. 19).

One would be motivated to provide these features, as it is the easiest way to allow the user to dynamically select and manipulate a portion of display.

7. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel et al. (US 5,463,725) in view of Kuno et al. ("Kuno", US 5,467,102) in view of Huffman et al. (5,663,748) and in further view of Kuzunuki et al. (6,266,057 B1).

Claim 74: Henckel et al., Kuno or Huffman et al., either singularly or in combination disclose, the step of inhibiting a normal page turning operation while said article information is being displayed in enlargement. However, Kuzunuki et al. disclose a function that inhibits switching to the page handling mode, when a pen input is used (column 13 lines 1-9 and Figs. 14a and 14b). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a function, as taught by Kuzunuki et al., to inhibit page turning operation when the page is enlarged, in the modified Henckel et al. One would be motivated to provide this feature, as it will be necessary for the user not to get confused when the page turning operation is accidentally performed, when viewing a specific portion of a document in a enhanced font.

8. Claims 83-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel et al. (US 5,463,725) in view of Kuno et al. ("Kuno", US 5,467,102) in view of Ho (US 6,407,757 B1) and in further view of Lovett et al. (US 7,134,072 B1).

Claim 83 is similar in scope to claim 87, and therefore rejected under similar rationale. However, neither Henckel et al. or Kuno explicitly disclose:

- reception means for receiving the ML data described in a mark-up language via a communication line from a server; ML data conversion means for converting the ML data received by said reception means into the image data in a unit of page of predetermined size;

However, Lovett et al. discloses a method for receiving information from a server (Fig. 3), and converting a mark-up language (XML) data (see Fig. 7) using a document schema. Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by Lovett et al., to convert mark-up language data into a page format of a book, in modified Henckel et al. One would be motivated to provide this feature, as more and more information is being stored in a generic mark-up language, and to make this information available to users, it will be necessary to convert the mark-up language information to a familiar book format.

Claim 84: Lovett et al. further disclose wherein said ML data conversion means comprises a tree structure converting portion for designating a single tree structure from the link structure of said ML data as well as converting said tree into a one-dimensional book structure by searching said tree in a predetermined search order ( the parser 54 calls one or more node factories 58 to construct the in-memory tree representation of the XML document... column 5 lines 35-49 and Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by Lovett et al., to create a searchable tree structure from a linked list mark-up language information, in modified Henckel et al. One would be motivated to provide this feature, as it will be very efficient to search a tree structure than a typical word search.

Claim 85: Lovett et al. disclose, wherein said tree structure converting portion searches the link structure of said ML data giving priority to the depth (i.e. ... node factory may also be used to search the XML document ... column 3 lines 42-49 and Fig. 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time to provide a method, as taught by Lovett et al., to search the link structure, in modified Henckel et al. One would be motivated to provide this feature, as it will be very efficient and quick to search by the user, if a priority to depth is used to create a tree structure.

Claim 86: Henckel et al., wherein said display controller comprises a tag appending portion for appending a tag indicating a page number of said page information to both end portions of said touch panel, said tag appending portion having a converted page tag display function of displaying the tag for the page having the page number appended by said page number appending portion on said touch panel (i.e. ... Bookmarks 32 may be graphically placed onto a displayed page... column 3/4 lines 65-5 and Fig.3).

9. Claims 90-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel et al. (US 5,463,725) Kuno et al. ("Kuno", US 5,467,102) and in further view of Fitzpatrick et al. (US 5,392,387 A).

Claim 90 Henckel et al teach, a page information display method, in a page information display method for displaying a page of predetermined size as a unit and, with a tag, electronic information having a plurality of information as a unit of page, comprising:

- detecting a page holding operation and calculating a number of holding pages in said page holding operation based on a position on said touch panel which corresponds to at least one of an information access area of said touch panel and a tag display area of said touch panel (a determination is made of the

necessary action to be performed at step 76-actions 3/5, column 6 lines 27-39 and Fig. 6 and Fig. 4);  
but do not explicitly disclose,

- calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied to a position;

However, Kuno discloses , a portable display device capable of presenting a document in an easy to read format (Abstract), and further teach, calculating a number of holding pages in said page holding operation based on a magnitude of a pressure applied (the speed of moving the pages can be changed according to the strength at which these operation buttons 4 to 7 are pressed -inherent that a calculation must e done before moving the pages-, column 5 lines 34-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time to combine the calculation base don a magnitude of a pressure applied, as taught by Kuno, in Henckel in order to provide the user a quick and efficient way to move multiple pages of the viewing document.

Fitzpatrick further teach,

- calculating a tag length which determines a length of a current page tag appending to a current page by referring m a length of a tag display area as a reference (Also depicted within FIG. 4 are multiple chapter tabs 76 –inherent that the length must be calculated-, column 3 lines 48-56);
- setting a semantic display which sets each of the length of the tag to be shorter at a lower hierarchical level, with the tag length of the current page tag



- as a maximum value (note the tags 76 have a semantic display based on hierarchical levels in Fig. 4);
- displaying a tag content according to a tag length and a font size for display (note the Index Tab 78 is based on the content in Fig. 4);
  - and displaying page information of a current page to be displayed in an information access area, wherein the displaying of said tag content includes displaying a page number on a tag capable of being displayed (see the Tabs 76 include information about the page in Fig. 4).
- Although Henckel, Kuno or Fitzpatrick alone or in combination do not explicitly teach, setting a line tag display for a certain range when a length of a tag display area is insufficient for the total page number; semantically displaying the tag length to be shorter at said lower hierarchical level, it would have been obvious to one skilled in the art at that time to provide for modifying the length of the tabs, as suggested by Fitzpatrick (the box surrounding the arrow within control element 80 may be deleted if no topics are present with the index which have been previously designated by a user – modify the tab 76-, columns 3-4 lines 57-8).

Claim 91: Fitzpatrick further teach, wherein the method comprises, after setting the semantic display, inserting an interval display line which changes a thickness of a tag contour line at every page interval, depending on a content of page information(the box surrounding the arrow within control element 80 may be

deleted if no topics are present with the index which have been previously designated by a user – modify the tab 76 outline-, columns 3-4 lines 57-8).

Motivation to combine by Fitzpatrick with modified Henckel is the same as in claim 90.

Claim 92: Fitzpatrick teach, wherein the displaying of said tag content includes displaying a page number on a tag capable of being displayed (Fig. 2).

Motivation to combine by Fitzpatrick with modified Henckel is the same as in claim 90.

Claim 93: Henckel teach, wherein said pressure comprises a pressure applied to an information area of said page displayed on said display unit (Fig. 4).

### ***Response to Arguments***

10. Applicant's arguments filed on February 27<sup>th</sup>, 2009 have been fully considered but they are moot in view of new rejection.

A. Applicant argues, "That is, like Huffman and Henckel, Fitzpatrick and Ho, nowhere does Amro teach or suggest detecting a page holding operation and calculating a number of holding pages in said page holding operation. Thus,

Amro certainly does not teach or suggest calculating a number of holding pages in the page holding operation based on a magnitude of a pressure applied to a position on the operation unit which corresponds to at least one of an information access area of the display unit and a tag display area of the display unit, as in the claimed invention". The Examiner respectfully disagrees, maintains the rejection and refers the applicant to claim rejections for details.

### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anil N. Kumar whose telephone number is (571) 270-1693. The examiner can normally be reached on Wednesdays and alternate Mon-Tue and Thu-Fri EST (Alternate Mon-Tue and Thu-Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Dennis Chow can be reached on (571) 272-7677. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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